I/WE CLAIM:

1. A quick-install irradiation unit for irradiating a surface, comprising:

a frame for supporting a radiation source and a means for focusing radiation emitted by the radiation source, the frame being configured to be mountable at only one end thereof; and

a mounting bracket for receiving the one end of the frame for mounting the frame to a flat surface, so that a radiation source mounted to the frame is supported in proximity to the surface and radiation emitted by the radiation source is focused on the surface by the means for focusing.

2. A quick-install irradiation unit as claimed in claim 1 wherein the mounting bracket is adapted to be mounted to a structure supporting the surface to be irradiated, the mounting bracket detachably securing the one end of the frame to maintain a longitudinal axis of the frame in a fixed relationship with the surface to be irradiated.

3. A quick-install irradiation unit as claimed in claim 2 wherein the elongated support frame comprises a housing at the one end, the housing being receivable in an open end of the mounting bracket.

4. A quick-install irradiation unit as claimed in claim 3 wherein the radiation source is supported between respective ends of the elongated support frame, and the means for focusing the radiation is supported between

respective ends of the elongated support frame and reciprocally moveable about the source relative to the support frame, so that the radiation is focused in a narrow band that is systematically swept over the surface to expose the surface to radiation.

5. A quick-install irradiation unit as claimed in claim 4 wherein the means for focusing is reciprocally moved by a gear reduction motor and a cam assembly supported by the housing and operatively connected to the means for focusing.

6. A quick-install irradiation unit as claimed in claim 4 wherein the means for focusing the radiation comprises an elongated reflector.

7. A quick-install irradiation unit as claimed in claim 4 wherein the means for focusing the radiation comprises a reflector and a elongated lens.

8. A quick-install irradiation unit as claimed in claim 4 wherein the radiation source comprises an ultraviolet lamp.

9. A quick-install irradiation unit as claimed in claim 8 wherein the ultraviolet lamp is a germicidal/ozone producing lamp.

10. A quick-install irradiation unit for irradiating a surface that collects or supports growth of micro-organisms, comprising:

an elongated frame and a housing secured to one end of the frame;

a mounting bracket adapted to be mounted to a structure, and to receive the housing to support the elongated frame in proximity to the surface to be irradiated;

an ultraviolet radiation source supported by the elongated frame for irradiating at least a portion of the surface to be irradiated;

a reflector for focusing the ultraviolet radiation emitted by the source, the reflector being rotatably mounted to the frame; and

means for oscillating the reflector so that the surface is systematically exposed to germicidal levels of radiation.

11. A quick-install irradiation unit as claimed in claim 10 comprising means for detachably locking the housing to the mounting bracket to securely support the elongated frame in proximity to the surface to be irradiated, regardless of an orientation of the quick-install irradiation unit.

12. A quick-install irradiation unit as claimed in claim 11 wherein the ultraviolet radiation source comprises an elongated ultraviolet lamp wired only at one end thereof to an electric power source that is supported on the one end of the frame securing the housing.

13. A quick-install irradiation unit as claimed in claim 11 wherein the reflector has a polished side positioned next to the ultraviolet lamp.

14. A quick-install irradiation unit as claimed in claim 11 wherein the means for oscillating the reflector comprises a gear reduction motor and a cam assembly.

15. A quick-install irradiation unit used with an air filter having a filter medium for removing particulate matter including at least a portion of micro-organisms from an air stream to be filtered, the quick-install irradiation unit comprising:

an elongated frame and a housing secured to one end of the frame;

a mounting bracket adapted to be mounted to an air handling system in proximity to the filter medium, the mounting bracket removably receiving the housing to support the elongated frame in proximity to the filter medium;

at least one ultraviolet radiation source supported by the elongated frame for exposing at least a portion of the filter medium to the ultraviolet radiation; and

a reflector for focusing the ultraviolet radiation emitted by the source, the reflector being supported by the elongated frame behind the radiation source.

16. A method of making a quick-install irradiation unit mountable to a flat surface in any orientation, comprising steps of:

a) constructing a box-shaped mounting bracket having an open top end and mounting flanges that extend from at least two opposed side edges for mounting the mounting bracket to the flat surface;

b) constructing an elongated support frame having a housing at one end and a frame structure supported by the housing, the frame structure supporting a reflector and adapted to support an elongated ultraviolet lamp in front of the reflector, and the housing being sized to be closely received in the open top end of the mounting bracket; and

c) constructing a mechanism for interlocking the mounting bracket and the housing so that the housing is retained in the mounting bracket when the mechanism is in a locked position, regardless of an orientation of the mounting bracket.

17. A method as claimed in claim 16 wherein step c) comprises steps of: securing a locking pin to a bottom plate of the mounting bracket; forming aligned openings in the housing to receive the locking pin; and, securing a latch member to a pivotal mount on an external side of a top plate of the housing so that the latch member can be rotated to slide under a head of the locking pin.

18. A method as claimed in claim 16 further comprising a step of forming the reflector from a sheet of metal having a polished side.

19. A method as claimed in claim 16 further comprising a step of extruding the reflector, and coating an inner surface of the reflector with a reflective material.

20. A method as claimed in claim 16 further comprising a step of mounting the reflector to swivel brackets that permit the reflector to be oscillated around a rear side of the ultraviolet lamp and connecting a motor to a one of the swivel brackets to oscillate the reflector.